MYRMECIA

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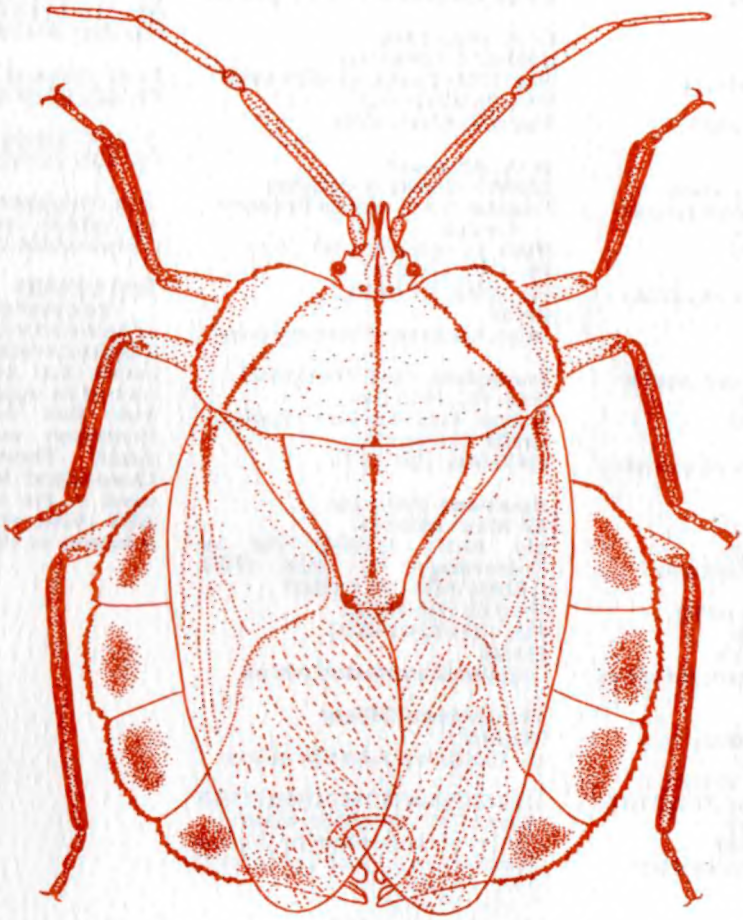

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THE COVER

The cover depicts *Peltocopta crassiventris* (Hemiptera: Tessaratomidae), a beautiful insect that provides maternal care of its eggs and nymphs for their first two instars. The illustration was prepared by **Geoff Thompson** of the Queensland Museum and was used in the logo for the 29th AES AGM and Conference in Brisbane in 1998.

MYRMECIA

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COPY DEADLINE FOR NEXT ISSUE

Material for publication in the August 1999 issue of *Myrmecia* should be in the hands of the Editor at the address below by **Friday 23 July 1999**. Submission to murray.fletcher@agric.nsw.gov.au is preferred but submission on IBM-compatible floppy disk in a major word processing format or by fax, letter or carrier pigeon to the address below is acceptable.

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REPORTS

ICE 2004 Bid for Brisbane

A committee was formed at the last AES Conference to consider making a bid for Australia to host the 2004 International Congress of Entomology. The committee comprises David Yeates (Qld), Geoff Allen (Tas), Jonathan Majer (WA), Alan Anderson (NT), Andy Austin (SA), Murray Fletcher (NSW), Tim New (Vic), Jim Cullen (ACT), Myron Zalucki (Qld, convenor)

Recent discussion by members of the committee has decided unanimously that the preferred city to host this important entomological event is Brisbane.

Of the two cities considered (Sydney and Brisbane) Brisbane is the better choice for a number of reasons.

1. Cost of accommodation
2. Suitable venue with plenary hall and smaller

JOB VACANCY
Editor of "*Myrmecia*"

As indicated in my News Bulletin Editor's Report at the last AGM (published in the November 1998 issue of *Myrmecia*), I will not be available for reappointment as Editor of this illustrious publication for a further term.

After nearly eight years and 31 issues, I would like to pass the reigns on to a younger member of the profession who could perhaps bring new ideas and a rash of new enthusiasm to its production. ***Myrmecia* provides links to every part of the Australian entomological community and a high profile for its Editor is concomitant with the position.** I know that there are many entomologists in Australia who are not only capable of maintaining *Myrmecia* at a high standard but would gain considerably from their involvement with the publication.

Don't be shy! Contact a member of the Society's Executive (details on inside front cover) and offer your services to your profession.

meeting rooms in close proximity to suitable accommodation
3. Although Sydney has many of Australia's tourist icons, most delegates will get to and from Brisbane on international flights via Sydney anyway and can see the sights at their leisure.
4. More attractive winter climate in Brisbane
5. Number of entomologists living in Brisbane. Although the congress will have professional conference organisers, face to face contact with colleagues, when needed, is important.
6. Close proximity to a wide range of interesting habitats.
7. It is easier to get about in than Sydney.

Sydney has its obvious advantages (higher international profile, especially with the 2000 Olympics; superb harbour with icons; close access to a wide variety of habitats, including rain forest) but, for the reasons given above, it is felt that the advantages of Brisbane, particularly cost of accommodation, would be easier to sell to the ICE Committee.

Now comes the hard part - selling to the ICE Committee that the Congress should come to Australia in 2004. Bid documents will be prepared for submission to the ICE Committee, together with letters of support from National and State Scientific Bodies and Politicians.

The following suggestions have been made for creating the support needed and all members are asked for further suggestions.

1. We develop a website (associated with the AES website at UQ) that indicates we will be bidding and why Australia and Brisbane is the place to go.
2. We need to flag the exciting entomological science that is taking place here and the regional importance of Entomology.
3. That the program we will be developing will be relevant to the future development of entomology
4. We will need to have the support of regional societies
5. We need to get the USA on side and entomologists there interested in coming here - direct email to colleagues perhaps.
6. Need to "lobby" the ICE committee members (tastefully, of course)

This will be an event for all Australian entomologists and your support will be needed. Send your comments/suggestions to:

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REGIONAL NEWS

AUSTRALIAN CAPITAL TERRITORY

CSIRO Entomology

Ray Akhurst attended the IOBC/WPRS "Capturing the Potential of Biological Control" meeting in Vienna in March where he presented the work that **Peter East** and he have done with the insecticidal proteins of *Xenorhabdus* and *Photorhabdus*, the bacterial symbionts of entomopathogenic nematodes. He also visited **David Ellar** at Cambridge University to talk *Bt* insecticidal proteins and went to Montpellier to assess a PhD thesis on the co-speciation of the bacterial symbionts of *Xenorhabdus*.

Lisa Bird, who formerly worked with **Neil Forrester**, NSW Agriculture, in Narrabri is now working in Canberra. Her work with **Peter Christian** and **Ray Akhurst** is still directed towards *H. armigera*.

The CSIRO Collection Group chaired by **Jim Cullen** met in Hobart on 15-16 February. The group includes the Australian National Insect Collection (ANIC), Australian National Herbarium (ANH), Australian National Wildlife Collection (ANWC), and the CSIRO Fish Collection. The agenda included finalising a capability statement and brochure for all the national collections, biological informatics and preparation for a national stocktake of National Research Facilities, as well as viewing the various collections in CSIRO Marine Research.

In early March, **Prof J. Routti**, accompanied by **Paul Wellings** (DISR) and **Nicholas Newman** (EU), visited CSIRO Entomology. Prof Routti is the head of the European Union's Fifth Framework Program (FP5) with a $AUS27bn research program. His visit included a short introduction to the Division, the Division's work in Europe, an introduction to Australia's interest in biological/ biodiversity informatics followed by demonstrations of BioLink by **Steven Shattuck** and **Ian Reid** and interactive identification of adult beetles by **John Lawrence**.

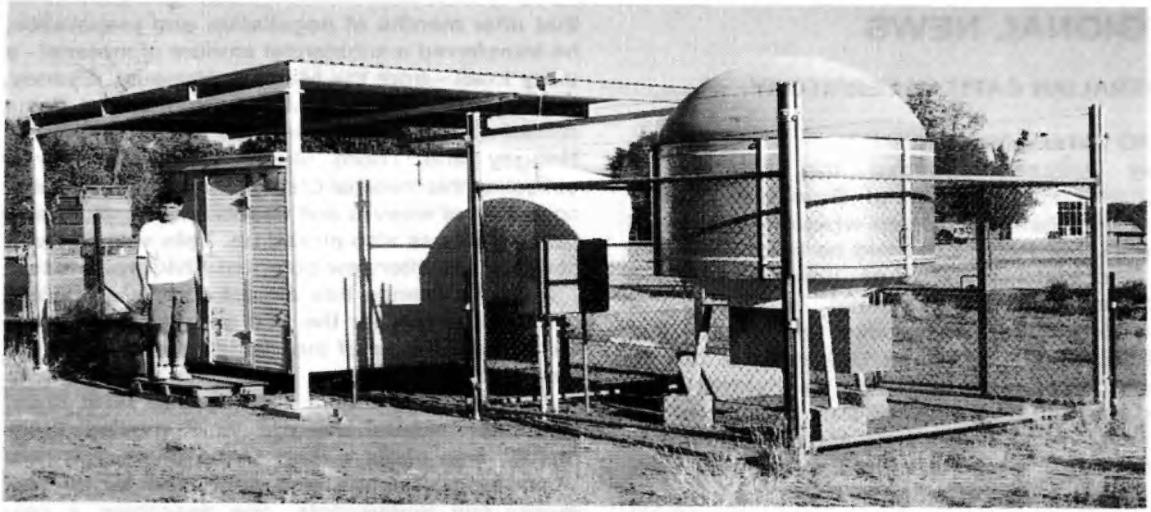
The proposal for the Global Biodiversity Information Facility (GBIF) has taken a fair share of **Ebbe Nielsen**'s time recently. Ebbe was in New Delhi (19-20 March), Paris (21-26 March) for a GBIF meeting, and Washington, DC (27-31 March) for the review of the USNM.

Graham Crompton, the ANIC Manager, reports that after months of negotiation and preparation, he transferred a substantial amount of material - a utility load! - from the Macleay Museum, Sydney, to the ANIC, the majority of the material being collections of ants and beetles made by **George Hangay** and **Thom Gush**. Whilst in Sydney collecting this material **Clarry Chadwick**'s sizeable collection of weevils and associated literature and field notes was also picked up. **Tom van Gerwen** continues to interview potential ANIC volunteers.

John Lawrence has almost completed coding character states for the 950 taxa making up the database "Beetles of the World". **Anne Hastings** has almost completed the taxon images, with about 97% of the taxa illustrated at least once. Character illustrations are now moving more rapidly, with about a third of the characters now illustrated. John has also submitted for internal review two manuscripts: one describing a new *Omma* and discussing the relationships of Archostematan beetles and another with **Adam Slipinski** on the phylogeny and classification of the family Zopheridae. **Rolf Oberprieler** has written the major part of a joint response with **Zimmie**, **Chris Reid** and, hopefully, **Willy Kuschel** to Farrell's recent controversial paper on co-evolution of Phytophaga (weevils and chrysomeloids) and angiosperm plants in *Science*.

More recently **Rolf Oberprieler** has written the major part of a joint paper with **Erik Arndt** of the Hochschule Anhalt in Germany on the biology and immature stages of *Manticora*, a relict African genus of huge tiger beetles. Zimmie is making good progress with Vol. IV of *Australian Weevils*. He has more or less completed the key and text of the large and difficult genus *Leptopius* and is now trying to find a way of meaningfully subdividing the perplexing group of adelognathous weevils. We hope to be able to commence the final typing of the manuscript later this year. Also later in the year we are going to start working on the following volume of this series. In between these scientific endeavours Rolf has taken to photographing Australian weevils "live" so to build up an image library. **Andrew Calder** is finishing up three manuscripts on the Australian Elmidae and an additional one on Dermestidae. He is also continuing work on the Cerambycidae, studying the male and female genital characters in the tribe Strongylurini.

Jo Cardale says she is making good progress with updating her Apoidea catalogue. During May



Ian Harman with his insect monitoring radar, Bourke, NSW in April 1998

Haikou Wang on survey in SW Queensland, July 1998

she will call in at The Natural History Museum, London. **Ian Hardy** (Department of Animal Biology and Ecology, University of Granada, Spain) spent an afternoon in the Project, talking about his work on polyembryony. There was a full roll up of hymenopterists at the seminar he gave at ANU.

Marianne Horak reports that **Michael Braby's** Butterfly Book is complete – congratulations to Michael, **Murray Upton** and the others involved in this *magnum opus*. **Ian Common** is finishing the plates for the third and final volume of his oecophorine revision and **Leanne Regan** will visit him after Easter to pick up the completed manuscript and all the plates. **Vanna Rangsi** has finished reorganising the subfamily Geometrinae and is now in the middle of curating the Larentiinae. **Hari Sutrisno** is busily producing cladograms for the pyraustine genus *Glyphodes* he is studying for his Master's thesis. In three months **Lauri Kaila** (Finland) has boosted the count of known Australian elachistid moths from about 15 to over 80.

In February **Harley Rose** and **James Walker** visited the cockroach collection to take data for their various studies. Much time has been spent in readying Volume 3 of the *Monograph of Australian Tettigoniidae* for review prior to publication. Measurements of most species have been made and a cladistic analysis and key to listroscelidine genera is being prepared. Late in February **David Rentz** undertook a fieldtrip to the Darwin area and on 19 March David met **Piotr Naskrecki** in Darwin. Piotr is completing his graduate studies at the University of Connecticut with a thesis dealing with the phylogeny of the Tettigoniidae. He is a dynamic person with interests in the mites living in the noses of hummingbirds and presented a seminar on this topic at the ANU in April.

Graduate student **You Ning Su** is making considerable progress in his understanding of the Pygmy Field Crickets of the Nemobiinae and congratulations to **Claire Stephens** who has recently been accepted to a PhD program at the University of Adelaide. She commences her studies in June.

Mary Carver reports that she has been revisiting some indigenous *Aphis* species of Australia and New Zealand. **Pam Dale**, Landcare, New Zealand, visited Mary, seeking information on *Aacanthocnema casuarinae* and other psyllid species colonising *Casuarina*.

Laurence Mound reports that the Thysanoptera Room was packed during March. **Peter Taylor**, our energetic volunteer, spends each Monday packing loans, distributing reprints and labelling slides and has now re-sorted the extensive deep-freeze collections into numerical order – all essential and time-consuming jobs. **Ben Gunn** and **Sophia Dimitriadis** have been using new camera and computer software very effectively to produce pictures for **Peter Cranston**'s forthcoming CD-ROM on aquatic organisms. This apparatus has really proved its value in teaching our two Colombian visitors **Emilio Arevalo** and **Dmitri Forero** about thrips structure and biology. **Gerald Moritz**, a CSIRO guest from Halle, Germany, worked with Laurence to produce a data matrix of 105 characters for 80 thrips species and from this generated a new LucID identification system for AQIS. Together they also took over 5000 individual photomicrographs, that the *Automontage* software processed to yield 550 completed pictures. These are now being entered into the LucID key and this will then be cut onto a new CD-ROM for AQIS entomologists.

Marcus MATTHEWS
Regional COuncillor

AQIS, Plant Quarantine Policy Branch,

Penny Greenslade is working for most of this year at AQIS but is managing to continue to pursue her springtails with vigour. **Wendy Lee** has joined the branch on contract from CSIRO Division of Entomology and is working with **Alison Roach** on Import Risk Analyses for horticulture. In March this year **Glynn Maynard** went on a survey of the Gulf of Carpentaria as part of the Northern Australian Quarantine Strategy. **Robert Duthie** has joined the Branch from NSW Agriculture and is working with **Wendy Odgers** on a variety of fruit fly issues.

Tingkui Qin is settling into the branch and has also been working on Import Risk Analyses for horticulture. Tingkui and **Kay Lindsay** attended a Timber Pest Conference (19-21 April 1999) in Canberra. The conference was organised by AQIS with the aim of raising awareness of timber pest problems (such as Asian longhorned beetle which arrived in the United States in timber packaging from China) and looking at current import arrangements for timber, timber packaging and timber products. The meeting involved stakeholders from industry sectors and countries that export timber to Australia.

AQIS, Plant Protection Branch

Ian Naumann's work in the National Office of Animal and Plant Health took him to Darwin in March to represent AFFA at a workshop on the giant northern termite, *Mastotermes darwiniensis*. In April Ian was called upon to assist during an incursion into New Zealand of the Australian pyralid *Herpetogramma licarsisalis*. *H licarsisalis*, otherwise known as the sod webworm, is a minor pest of pastures and lawns in eastern Australia and an occasional, seemingly windblown introduction into New Zealand. None of the previous introductions have led to establishment but the April outbreak in the milder, far north of the North Island may have a different outcome. For the National Office Ian is also involved with ongoing problems around the introduction of exotic insects via international aircraft, pest databasing and diagnostics.

Australian Plague Locust Commission

Control Officer **Peter Spurgin** is currently battling the migratory locust problem in Madagascar in an attempt to figure out why the problem is continuing. **David Hunter** has done some more trials with the *Metarhizium* fungus against the migratory locust this time in southern Queensland. **Kevin Walden** and **Art Diggle** from Ag WA visited in March to discuss locust modelling. **Graeme Hamilton** and **Walter Spratt** have attended end of season debrief and planning meetings in SA and Qld.

Australian National University, Division of Botany & Zoology

Holly Trueman, who was awarded first-class honours in December 1998 for her project on margarodid phylogenetic studies using molecular data, is in England seeking relevant employment prior to doing a PhD in molecular phylogenetics. Hopefully Holly will continue to study insects and not be lured into the realm of vertebrates or plants. **Sharyn Wragg** is writing up her honours project on the life history and systematics of two species of day-flying moths - the agaristine species *Agaristoides feisthamelii* and *Phalaenoides tristifica*. Sharyn has completed a cladistic morphological study of numerous species of Australian Agaristinae with much of her data derived from the genitalia. Her examination of the latter was facilitated by use of the vesica everter (phalloblaster) under the helpful guidance of her CSIRO supervisor **Marcus Matthews**. Sharyn also completed field studies on her main study species at Mt Clear in Namadgi National Park and has been able to determine host preferences of the larvae. **Lyn Cook** is writing papers on the karyology and evolution of *Apiomorpha* (Eriococcidae) and these will be the basis of her PhD thesis. **Hanna Reichel** has completed the molecular component of her PhD study on the systematics of the ant genus *Rhytidoponera*. **Kendi Davies** and **Brett Melbourne** are in the final stages of PhD thesis writing and plan to start their postdoctoral positions in CSIRO Wildlife & Ecology in June or so. **Hari Sutrisno** and **You Ning Su** are continuing their Masters projects on pyralid moths and nemobiine crickets respectively. **Penny Gullan** has been busy teaching but in February, prior to the start of semester, she made a trip to the University of California, Davis, when three other coccidologists, **Dug Miller** (USDA, Washington), **Doug Williams** (Natural History Museum, London) and **Ray Gill** (California Food & Agriculture, Sacramento), were spending several weeks curating the very large scale insect collection in the Bohart Museum at UCD. Thus Penny was able to talk coccidology with three of the Northern Hemisphere's scale experts.

Wendy ODGERS
Regional Councillor

NEW SOUTH WALES

Orange Agricultural Institute

Graham Thwaite visited Western Australia in February at the invitation of apple grower organisations and AGWEST. Most of his time was spent in the south-west from Dwellingup to Manjimup. He reviewed progress in the latest campaign by AGWEST to eradicate a codling moth infestation from Dwellingup and talked to growers on the concept of integrated fruit production (IFP). His hosts for the week were entomologists **Bill Woods** and **Peter Davis**.

David Pree, Agriculture and Agri-Food Canada discussed field resistance to miticides and resistance mechanisms in mites with **Grant Herron** and **Graham Thwaite** at EMAI, Camden, in February. David continued on to Canberra and Adelaide after his Sydney visit.

Adrian Nicholas completed his term in March as a student at that ancient institution in New

South Wales, Bathurst Agricultural Research Station. After nearly six years at Bathurst, during which time he gained his MSc and completed his PhD project (both through the University of Western Sydney-Hawkesbury), he's managed to extend occupation of his office by undertaking some casual work for NSW Agriculture.

Agricultural Scientific Collections Unit

Most of our attention recently has been concentrated on the Southern red mite, *Oligonychus ilicis* (McGregor), first identified in Australia by **Danuta Knihinicki**. This mite has only been located at two nurseries in the Sydney region at this stage although purchases from one of these nurseries must have spread the species far and wide in home gardens and it will eventually turn up elsewhere as well. The species is a known pest of azaleas, camellias, rhododendrons and hollies. It is also a sporadic pest of coffee in Brazil and it has a very wide host range on which it is apparently able to feed but on which it has not proved itself to be a pest. The Sydney population is also exhibiting some acaricide resistance.

Recent visitors to the Unit have included **Penny Greenslade**, looking for records of Collembola and other organisms associated with mushroom cultivation, **Gary Gibson** (Agriculture Canada) and **Stephan and Olga Schmidt** (ANIC). Both Gary and Stephan were interested in our holdings of chalcidoids while Stephan also looked through the sawflies. Olga took the opportunity to examine the moths.

QUEENSLAND

Army Malaria Institute (AMI)

It has been several years since we have had news from AMI and this is an attempt to bring members of the Society up to date with the institute. The institute was formerly located at Ingleburn, near Sydney, but moved to a new facility at Enoggera, Brisbane in November, 1996.

In early 1997, the chief entomologist, **Tony Sweeney**, retired from the Army after 27 years service. He is now chief entomologist at the South Pacific Commission in Noumea, New Caledonia, and regularly travels to the Solomon Islands, Vanuatu and Fiji to conduct his work. Although retired from the Army, Tony is a member of the AMI advisory board and has returned to the institute several times since his move to Noumea.

Bob Cooper continues to work on the distribution and biology of members of the *Anopheles punctulatus* group in Papua New Guinea. **Steve Frances** is working on the evaluation of personal protection measures (repellents etc.) against mosquitoes, and also conducts surveys of arbovirus vectors in Shoalwater Bay Training Area, located north of Rockhampton.

Sarah Russell joined the institute in February 1998 and is responsible for the maintenance of mosquito colonies and assists in identification of *Anopheles* mosquitoes using PCR and DNA techniques. Sarah's husband, **Bruce Russell,** also joined the Army in early 1998 and is now working in the Clinical Field Laboratory of the institute on *in vitro* assays of malaria parasites.

In February-March, Bob, Steve and Bruce spent 5 weeks in Bougainville, PNG, as part of the Peace Monitoring Group, working on a number of projects including antimalarial drug trials, evaluation of prototype bednets and collections of *Anopheles* mosquitoes from several areas on Bougainville and Buka. In late April, **Steve Frances** was awarded a PhD from the University of Sydney for his work on the ecology of mite vectors of scrub typhus in Thailand. The work was conducted under the supervision of **Tony Sweeney** and, following Tony's retirement, by **Richard Russell** at Westmead Hospital.

Queensland Museum

Chris Burwell recently returned from a three-week trip to Sri Lanka. Apart from more than a week in Colombo obtaining permits and permission letters and eating lots of curries, Chris spent most of his time at Sigiriya in the dry zone, central Sri Lanka. Sigiriya is a wildlife reserve that contains the ruins of a fifth century palace and fortress built around and on top of an enormous rock. It also happens to be Sri Lanka's most popular tourist attraction. Chris was helping **Chris Pavey** (formerly at UQ Entomology, now on a Humboldt fellowship at Ludwig-Maximilians University, Munich) conduct research on the foraging ecology of Schneider's leaf-nosed bat. Chris also managed some collecting, bringing back about 2000 microhymenoptera.

Geoff Monteith recently spent a week in northern Queensland emptying traps and collecting dung beetles around Ravenshoe on the Atherton Tableland.

Geoff Thompson will be participating in an insect themed exhibition entitled "Insectasite" to be held at the Arts Foyer Gallery at the University of Southern Queensland, Toowoomba, from 4th May until 7th June. The exhibition will feature a diverse range of media including sculpture, computer graphics, video and drawings and paintings.

Martha Yanez, who has just received an MSc from UNAM, Mexico on a threatened Mexican tarantula, *Brachypelma klaasi*, has been working on a manuscript with **Robert Raven** on hair types on tarantulas around the world (the types have been touted as highly informative at all taxonomic levels.). She has been in Queensland from March 12-May 4 and hopes to return to continue a joint PhD with UQ & UNAM on population ecology of the tarantulas of Mexico and Queensland. In both countries, spiders are being taken from the wild to keep pace with the demand from pet keepers. Of course, importing overseas tarantulas into Australia requires strict addressing of Quarantine regulations. At present, there is no restriction on the taking of tarantulas from the wild in Queensland.

Robert Raven will be in at Landcare, Auckland for 2 weeks from May 6, working on problems involving the mygalomorph complex of *Arbanitis/Misgolas/Cantuaria*, the Widows (*Latrodectus*, of course/still!) and ground hunting araneomorphs.

Queensland Institute of Medical Research

Brian Kay travelled to Vietnam in April to conduct part of a training workshop on community based methods for *Aedes aegypti* control, the main mosquito vector of dengue fever. During his visit, Brian also checked on the progress of implemented control strategies, using a combination of copepods and community participation, in 3 provinces northeast of Hanoi. The overwhelming success of the project to date, in terms of reduced incidence of both *Ae. aegypti* and dengue fever in treated provinces, has provided the impetus to expand the project to include central and southern provinces of Vietnam.

Sarah Phelps, an undergraduate zoology student from Canada, will visit the Mosquito Control Lab as a vacation scholar for 8 weeks. Sarah will work with **Michael Brown** and **Tonya Watson** and is interested in studying the non-target effects of common insecticides used for mosquito control in southeast Queensland.

Peter Ryan is nearing completion of his PhD thesis entitled "Ecology and control of arbovirus disease in southeast Queensland" and hopes to submit sometime in May. After a short holiday, Peter will return to the Mosquito Control Lab and join the team who are working on developing better control strategies for *Ae. aegypti* in north Queensland and Vietnam.

Congratulations to **Tonya Watson** who was named in the UQ Dean of Postgraduate Students' Commendation List for receiving unanimously outstanding examiners' reports for her PhD thesis on *Aedes notoscriptus*.

Griffith University

Heather Proctor and **Dave Walter** (University of Queensland) are anxiously awaiting the arrival of their first offspring, which will be called "Mites: Ecology, Evolution and Behaviour", due to be published by UNSW Press in June. In between reading galley proofs, Heather has continued to examine whether there's any reason for stream ecologists to identify aquatic mites to taxonomic levels more specific than 'Acari'. Another aquatic project, together with the Centre for Mined Land Rehabilitation at the University of Queensland, is an analysis of macroinvertebrate assemblages in ponds created by coal-mining activities. Heather is also involved with a survey of the mites and lice of megapodes with co-investigators **Darryl Jones** and two bleary-eyed feather-picking assistants. **Annette Ritchie**, an honours student in the Proctor lab, is asking the question "Does above-ground plant diversity correlate with diversity of litter arthropods?", with special emphasis on oribatid and mesostigmatid mites. **Natasha Witting**, also an honours student, is investigating the relationship between assemblages of stream macroinvertebrates and abiotic features at different scales (e.g. substrate particle size, riparian vegetation, catchment land-use).

The fruit fly group headed by **Dick Drew** is blossoming in 1999 with the slow but continuous appointment of new staff. Those having started since the last newsletter are **Dan McGuire** and **Barbara Clifford** (fly identification), **Tony Clarke** (ecology) and new PhD student **Raghu. Narelle Power** (curently UQ) will also start a PhD with the group in July. Currently our projects are largely overseas-based, with frequent travel by different members to PNG and Vietnam. Work in Bhutan is also on the cards. However, it is intended that the

students will work on local ecological issues, preferably using the rainforests of Queensland as their study sites.

University of Queensland

Congratulations to **Jenny Beard, Andrew Loch** and **Liza Miller** who have all submitted their PhD theses. Also, congratulations to **Gia Parkes** who has submitted her Honours thesis.

Rob Hengeveld, a biogeographer from the Netherlands, has been visiting UQ for the past month, He is interested in aspects of hotecology theory and had been involved in a project with **Gimme Walter**.

Peter Cranston, Chris Reid and **Ian Reid** visited from Canberra in order to demonstrate their new databasing program, "Biolink", which links mapping, reference information, specimen data and identification information at the touch of a button. Peter, Chris and Ian presented their dung beetle information, which met with great interest from all who attended.

John Jennings visited from the Waite Institute, Adelaide. **Steve Marshall**, from Guelph University, and his family are currently in Australia. Steve, who specialises in sphaerocerids, has beencollecting in New South Wales and Queensland. Steve took the opportunity to catch up with a past student, **Jeff Skevington**. He also spent some time in the University of Queensland Insect Collection and in the Queensland Museum Insect Collection.

There are a few new students haunting the halls of UQ. New PhD students include **Karen Bell, Ian Newton** and **Andrew McDowell**. Karen is examining local endemism patterns of dung beetles in the wet tropics. Ian is conducting a molecular study of *Heliothis* and ascovirus. Andrew is conducting research based in forensic entomology. **Farah Zavahir** is from Rhodes University in South Africa and is examining *Nezara* biology for her MSc. New Honours students include **Claire Baker, Shahana Salam, Andrew Ridley, Daniel White, Svetlana Micic, Chris Sharpe** and **Andrew Davies**.

April saw the launch of CulicID, the Interactive Key to Adult Female Mosquitoes of the Torres Islands and North Queensland. Congratulations to **Des Foley, Joan Bryan** and all involved for this impressive LucID key which has reportedly garnered international interest.

Finally, congratulations to CRC-TREM and the new CRC project for Tropical Plant Protection whose funds have been renewed for the following seven years.

A sandstone bee

The common stingless bee of northeast Australia, *Trigona carbonaria*, has been immortalised in stone at the top of an arch in the Great Court of the University of Queensland (see photo next page). The keystone bee relief was carved by **Rhyl Hinwood**, university sculptor, in consultation with **Tim Heard**, CSIRO Entomologist.

The anatomically correct bee measures about 600mm long. It is set against a layer of regular brood comb. The pollen baskets on the hind leg are clearly visible, as are its long mouthparts and character mouthparts and characteristic reduced wing venation. Even details of the eye facets and antennal segments can be seen. Stingless bees are highly social insects that store large quantities of honey and pollen in their hives. This was a highly prized food by the aborigines.

Beneath the bee on the same arch feature four other carvings in the theme of invertebrate aboriginal food, including a witjuti grub, Hercules club whelk, pippy and shipworm. Near the arch, which is in front of an entrance to the Anthropology Department, is a grotesque of Gairbaru (**Willy McKenzie**) a local aborigine whose tribal totem was the stingless bee.

USDA-ARS
Australian Biological Control Laboratory

John Goolsby and **Matthew Purcell** have been searching for natural enemies of *Lygodium microphyllum*, Old World climbing fern and *Melaleuca quinquenervia*, the swamp paperbark tree, in the coastal wetlands of New South Wales. Stands of *M. quinquenervia* were noted at Botany Bay, which may represent the southernmost extent of this species. **Kylie Galway** has been collecting and processing *Poliopaschia lithochlora*, a tube dwelling pyralid for shipment to Florida for quarantine screening. Kylie is interested in developing a post-graduate studies program related to biological control, entomology or weed science. **Tony Wright** is continuing his exploratory work for agents of *L. microphyllum* in SE Asia. **Jeff Makinson** is working with **Robin Giblin-Davis** (Univ. of Florida) to investigate the biology of the *Fergusonina/Fergusobia*, gall fly/nematode association on *Melaleuca*.

***Trigona carbonaria* immortalised in sandstone in the great court of the University of Queensland.**

CSIRO Entomology Long Pocket labs

Bob Sutherst participated in an ACIAR planning workshop in Harare in mid-April to prioritise futur e tick and tick-borne disease research opportunities in Africa. Adoption of the Australian IPM-based approach to the control of ticks and tick-borne diseases in Africa is being delayed by the need to develop an integrated package of measures that addresses all 3 tick-disease complexes in that continent. In early May, Bob leaves to attend the 2nd IGBP Science Congress in Japan, in his role as global leader of the pest, disease and weed activity for the Global Change and Terrestrial Ecosystems (GCTE) program.

Mic Julien is going to Tanzania, Kenya and Uganda, 26/4 to 15/5 to assess activity in biocontrol of water hyacinth for World Bank who are funding a Lake Victoria Environment Management Project.

Tim Heard spent February chasing weevils on Mexican Poppy in, you guessed it, Mexico. This plant is a nasty weed in the Northern Territory and surveying for natural enemies in the native range is underway. He then did the same on the weed *Jatropha* in Trinidad and Venezuela. A student riot was no problem in Venezuela but the Aussie cricket tour of the West Indies really made life difficult in Trinidad. Tim brought back lots of big fat cerambycid larvae for further study by **Richard Chan** in Brisbane quarantine. Meawhile **Tania Yonow** is putting her formidable computer skills to good use designing a database for cataloguing the natural enemies of the ever expanding range of weeds that the group are studying.

Gio Fichera and **Areli Mira** have been busy mass-rearing the mesquite leaf-tying moth *Evippe* sp. They have so far released about 50,000 adults across 4 States and have confirmed establishment & spread at 20 of the 26 release sites. Since its release from quarantine in October 1998, there has been a release of about 43,000 mesquite psyllids, *Prosopidopsylla flava*, but to date it has proved difficult to locate evidence of its establishment or spread at any of the release sites. **Rieks van Klinken** is currently checking up on release sites in northern Western Australia. Similar progress has been made for the weed *Sida*. Over the last 12 months, there has been a further release of ~30,000 adults of two species of the weevil *Eutinobothrus*, a biocontrol agent, into the NT and north Qld.

Tony CLARKE
Regional Councillor

Bureau of Sugar Experiment Stations

Peter Allsopp suddenly found himself as Chairman of the Entomology Sectional Committee of the International Society of Sugar Cane Technologists following the recent congress of the society in New Delhi - he thought that

pressganging only occurred in centuries past. The sugar entomologists plan their next workshop for Khon Kaen in Thailand for February 2000. This will be a great chance to see the peak damage from Thailand's moth borer problems and to develop ways in which cooperative programs can help minimise some of the diverse pest problems of sugarcane throughout the world. Peter can give more information on the workshop.

BSES has appointed **Warren Hunt** as IPM Coordinator in a project funded by the Sugar R&D Corporation. Warren will be based with **Peter Samson** in Mackay but will range widely through Queensland and NSW generating enthusiasm for testing 'best-bet' management strategies for important pests such as greyback and Childers canegrubs and soldier flies. His work will focus on grower groups who will test strategies on a wider scale than is possible in conventional trial work.

Liza Miller flew up from her self-imposed exile in Melbourne over Easter and submitted her PhD at University of Qld. The thesis covers morphological and molecular methods for identifying canegrubs and to examine the population genetics of populations of Childers canegrubs. We await the examiners' reports!

Gatton College Campus
University of Queensland

As a result of amalgamations and reorganisation, (what? them too!!) Integrated Crop Management, including Entomology, at the Gatton College Campus of the University of Queensland, is now part of the School of Land and Food of the Faculty of Natural Resources, Agriculture and Veterinary Science, which are spread across both St Lucia and Gatton Campuses.

Entomology based courses are alive and well despite the apparent upheavals. **Errol Hassan** recently returned from a sabbatical spent at the University of British Columbia, Vancouver, Canada, during which he worked on insect responses to plant extracts including Neem. He is still supported by Honorary Research Fellows **Derek Maelzer** and **Neil Heather**. Neil has just returned from a 2 week visit to Southeast Asia during which he participated in workshops at Bangkok and Manila, sponsored by the joint FAO / IAEA Division from Vienna on irradiation as a phytosanitary treatment.

QDPI

Citrus entomologists from around the nation descended on Mundubbera (a small town in the central Burnett, sort of west of Bundaberg for those geographically challenged) in April for the 51st Australian Citrus Growers Annual Conference. They included **Annice Lloyd, Bob Corcoran** and **Chris Freebairn,** who all presented papers at the conference, and **Dan Smith**. Chris presented a joint paper, "Jassid Leafhopper becomes Typhlocybine Fruit Pest!", which reported an overview of the research to date on *Empoasca smithi*. Fruit flies dominated the conference. **Robert Mangan** from Weslaco, Texas gave a keynote address on novel baits for fruit fly suppression and on post-harvest quarantine treatments. The conference generated a lot of positive publicity for entomology with ABC Regional Radio broadcasting from the conference. Their stories included one on **Dan "Bugs for Bugs" Papacek** and his rearing of beneficial insects.

Tonia Loughrey (Gatton) attended a seminar by **Judy Pell** (IACR-Rothamsted, UK) on "The role of insect behaviour in the dispersal of entomopathogenic fungi" at the CSIRO Longpocket laboratories. Perhaps more research towards potential commercialisation of insect pathogens, apart from BT, could be done here in Australia.

Large increases in numbers of silverleaf whitefly in the Bundaberg district in February-March caused all sorts of excitement there. **Paul DeBarro** (CSIRO) visited to impart his knowledge, while **Iain Kay** did some local firefighting. The SLW circus, otherwise known as an information workshop for growers, wound its way through the State in April and May. Performers included **David Adamson** and **Larissa Bilston** from RDE Connections (formerly from the CTPM) and **Paul DeBarro**.

In Toowoomba, **Graham White** stretched his grain storage engineering knowledge to present a session on early harvest and drying at a GRDC Adviser Update meeting at Moura in early March. He contributed to a GRDC workshop on extension for grain storage held in Sydney in late March. Most of the other Toowoomba people work on heliothis. Either they are too exhausted from their efforts at managing the beast during the summer season to report their activities or they, like their insect, have entered a state of diapause in the autumn. (My money is on the latter.) Either way, there is no news.

Iain KAY
Regional Councillor

SOUTH AUSTRALIA

The University of Adelaide
Department of Applied and Molecular Ecology

In February, the SA members of the Society and the Friends of the Waite Arboretum jointly hosted a guided walk of the arboretum with a focus on its insect fauna. Well publicised locally, it attracted in excess of 60 participants. Talks were given by **Mike Keller** on the biocontrol of the rose aphid, by **Gary Taylor** on aquatic insects of the Waite wetlands, by **John Jennings** on *Apiomorpha* galls on eucalypts in the mallee block and by **Jennifer Gardner** on migration and behaviour of the Caper White Butterfly on the solitary specimen of its host, Native Orange, in the arboretum.

In April The Ecological Society of Australia hosted a symposium, "Talking Ecology in SA" at the Flinders University of SA. Talks involving invertebrates included **Dawn Hawthorn-Jackson** on the ecology of the Horehound Plume moth, **Rachel Melland** on the integration of fire, herbicides and biocontrol of boneseed, **Paula Peeters** on the effect of leaf anatomy on the feeding behaviour of herbivorous insects and **Peter Crisp** on the invasion of exotic mites in native woodlands. Members of the Society also attending were **Tom and Jan White, Brenda Kranz, Gary Taylor** and **Duncan Mackay**.

Also in April, **John Jennings** was in Brisbane where he attended a planning meeting for the BioED project. BioED is funded by CUTSD to produce a range of interactive keys covering a diverse range of organisms from bacteria, protozoa, Diptera, Hymenoptera, frogs and higher plants. These will be made available on CD-ROM to universities and other interested groups and will hopefully be on-line on the WWW by the end of 2000. BioED is a cooperative project involving a number of academic staff from The University of Queensland, The University of Sydney and The University of Adelaide. John also inspected aulacid and gasteruptiid wasps at The University of Queensland insect collection and visited **Chris Burwell** at the Queensland Museum.

Robin Gibin-Davis from the University of Florida visited **Kerrie Davies** and **Gary Taylor** for two weeks in April to collect *Fergusobia* nematodes and *Fergusonina* flies which produce galls on myrtaceous hosts. Robin presented a Waite Distinguished Visitor Lecture on Nematodes, Figs and Fig Wasps, a nematology discussion group talk on phoretic nematodes of insects and a seminar on insect pheromones. A hectic collection schedule included visits to the southern Mt Lofty Ranges, to Burra and Clare in the Barossa Valley to examine the most western, disjunct population of the stringybark, *E. macrorrhyncha*, and to coastal mallee sites along the Coorong. On departing SA, Robin will travel through northern NSW and coastal Qld to sample galls from melaleucas.

We welcome two new postgraduate students to the Department. **Vanessa Carne** has started a PhD with **Hugh Possingham** and **Peter Bailey** on the risks of establishment of Qfly and Medfly populations in South Australia and **Marta Kasper** will be working on the ecology of the European Wasp in SA.

Related to the European Wasp project, **Dennis Hopkins** and **Andy Austin** visited New Zealand in April to talk with colleagues in Landcare Research on the environmental problems associated with the wasp in NZ and in baiting and biocontrol programs.

In late April, **Bob Matthews** from the Department of Entomology at the University of Georgia visited **Dennis Hopkins** and **Andy Austin** and gave a seminar on "Social Evolution in Sphecid Wasps".

After 13 years with the Department, **Paul Dangerfield** has left to take up a position at Animal and Plant Health/Northwatch, Queensland Department of Primary Industries, Cairns. The Department gratefully acknowledges his contribution towards the administration and curation of the Duncan Swan Insect Collection, towards contributions to research programs in the systematics of parasitic Hymenoptera and for his dedicated commitment to teaching. We wish Paul well for his new career path.

Department of Horticulture, Viticulture and Oenology

In February, **Robin Adair** (Keith Turnbull Research Institute) and **Stefan Neser** (Plant Protection Institute, Pretoria, South Africa) visited **Peter Kolesik** and brought him for description a whole swag of gall midges (Diptera: Cecidomyiidae) infesting various acacias in Australia. Robin and Stefan are working on biological control of Australian acacias that become weedy in South Africa and are currently rearing and studying biology and host specificity of Australian gall midges. Peter's taxonomic work is

supported by an ARC grant.

South Australian Museum

Lynette Queale (insects) and **Maya Penck** (birds) at the Museum have been looking at the contents of boobook owl stomachs. We found several full of beetles of the genus *Scitala*. These were found on Kangaroo Island in the winter months. We believe they might congregate on trees and are looking for any information or records that would support the idea that they overwinter in such a way that they could provide a feast for owls. (Reply to Queale:
queale@senet.com.au).

SA Water
Australian Water Quality Centre

At the AWQC the Monitoring River Health team is preparing for another season of field work in various parts of the State. The main interest this year is to sample some of the rivers that drain into Lake Eyre from its western side. A few waterholes up the Oodnadatta Track will have some nets waved about in them this year. One new project is the monitoring of the Onkaparinga River for the Onkaparinga Catchment Water Management Board which will keep **Peter Schultz, Rob Walsh** and **Sam Wade** busy, when not writing reports on similar work carried out for the Torrens and Patawalonga boards. **Rob Walsh** is also investigating solutions to the problem of the zooplankton from the Bolivar Sewage Treatment Plant that are causing blockage problems for the filtered water being piped to Virginia (on the Adelaide Plains not the USA!) for irrigation.

On days when microscope work becomes too much we have an extra inhabitant of the lab to observe. Since October 1998 we have had a hydrophilid beetle in an aquarium. Originally christened "**Hercules**" this was soon changed to "**Xena**" after she produced two egg masses after being in residence for about a month (evidence of sperm storage). Unfortunately none of the larvae survived for long but we did keep one for association with the adult. Xena is a species of *Hydrophilus* but we cannot be absolutely sure of her identity without post mortem examination. Based on the fact she was collected near Naracoorte she is probably *H. latipalpus*. She has a standard diet of lettuce with a few bean and snow pea sprouts for variety. She is also an avid scavenger of carcasses as a tadpole that died in the tank was rapidly consumed. Does anyone have details of the longevity of large water beetles? (Reply to **Chris Madden**:
chris.madden@sawater.sa.gov.au)

Gary TAYLOR
Regional Councillor

VICTORIA

IPM Technologies P/L

The busy time for insect monitoring in potato crops has finished at last, leaving **Paul Horne** and **Cindy Edward** more time to concentrate on lab studies and report writing. They are working on several invertebrate conservation assessment projects and will soon be commencing a project looking at pest management in organic farming. They will still be monitoring several crops that grow year-round so that the gains in terms of IPM adoption will continue but glasshouse and laboratory trials will be more popular in our Melbourne winter. They are supplying parasitoids of the potato tuber moth to growers interstate and these wasps are the focus for IPM adoption.

Sunraysia Horticulture Centre Irymple

LeAnn Beanland has recently joined the Australian Grapevine Yellows team to help search for a vector of this phytoplasma and develop potential management strategies for the disease. LeAnn has previously done work associated with the leafhopper vector of the aster yellows phytoplasma at Ohio State University.

Institute for Horticultural Development
Knoxfield

Crop scouts employed by E.E. Muir & Sons have completed a successful season of monitoring in *Brassica* vegetable crops in Werribee and Cranbourne. **Nancy Endersby** and **Peter Ridland** trained the scouts as part of the national project 'Advancing the integrated management of diamondback moth (DBM) in crucifer vegetables'. Growers valued the information provided by the scouts and used it to improve the timing of their insecticide applications for control of DBM and to decide whether treatment was necessary.

In October 1998, **Peter Ridland** and **Nancy Endersby** collected DBM from a canola crop about 25 km west of Werribee and from a Werribee vegetable grower's property. **Jing ye Zhang** tested the DBM for permethrin resistance and both

populations were statistically equivalent. The resistance ratio (compared with the susceptible Waite strain) was only about 2.5 times, implying movement of relatively susceptible moths into the vegetable areas in the spring. We plan to do more testing in spring 1999 to see if we can confirm the finding. If we can, the result is good news for resistance management.

Peter Ridland, Gordon Berg and **Nancy Endersby** visited Warrnambool to talk to farmers, chemical resellers and DNRE people as part of a workshop organised by **Helen Chenoweth**. The workshop was entitled "Controlling common pests that affect broad acre grazing industries in south west Victoria". Problems with diamondback moth in forage brassicas have been increasing in recent years. We are concerned that increased use of synthetic insecticides will exacerbate the problem by disrupting parasitoid populations that should be able to provide significant control of the pest in these situations.

Karen Green (formerly of Keith Turnbull Research Institute – ragwort project) is currently working at IHD Knoxfield as a Technical Assistant with **Nancy Endersby**. Karen helps with the national DBM project and uses her ragwort expertise in a host specificity test with *Cotesia plutellae* and *Nyctemera amica* for **Peter Cameron** (Crop & Food Research NZ).

Russell Goodman, our honeybee expert, is currently developing an information kit for pollination in crops. **Gordon Berg** has recently been promoted to the position of Manager of Crop Health Services at IHD.

Rutherglen Research Institute

Kevin Powell has recently joined the phylloxera team at Rutherglen where he will be leading the *Phylloxera management in Southeast Australia* project. They will be concentrating on a better understanding of population dynamics, increasing awareness of potential phylloxera movement in grapevines and methods of managing phylloxera on infested properties. Kevin previously worked on development of insect resistant transgenic crops in the UK and IPM in subsistence farms in PNG. He's working at Rutherglen with the newly appointed director of the Rutherglen Research Institute, **Garry McDonald**.

Inst of Sustainable Irrigated Agric. (Tatura)

In 1998 **Alexandre Il'ichev**, senior entomologist at ISIA Tatura visited Europe to discuss Oriental Fruit Moth (OFM) issues and Wide Area Mating Disruption (WAMD). Since then Alex has been collaborating with visiting scientist **Andrea Drago** from the University of Padua, Italy, who worked at ISIA, Tatura Centre during 3 months on WAMD project. Tatura also received a special visit from Canadian Scientist **David Pree**, a specialist in both entomology and toxicology, who spent 2 days with Alex on WAMD experimental area and delivered a presentation to Crop Protection group about IPM in Canada. The summer season has been a particularly busy and interesting time in Tatura with field work centred on Oriental Fruit Moth (WAMD) and Carpophilus Beetle. **Mofakhar Hossain, Avtar Saini** and **Cathy Mansfield** have been working on Oriental Fruit Moth (WAMD) and with a *Carpophilus* aggregation pheromone to determine possible control measures for *Carpophilus* beetle.

La Trobe University

Michelle Robinson is currently undertaking postgraduate studies at La Trobe University on earth mites in crops and pastures. She is supervised by **Ary Hoffmann** in the genetics department. She is assessing the reasons for control failures of earth mites. In particular she is looking at the contribution that different recently discovered species of blue oat mites have on control failures. These have been shown to differ markedly in pesticide responses.

DeAnn GLENN
Fiona CLISSOLD
Regional Councillors

WESTERN AUSTRALIA

Agriculture Western Australia (AGWEST)

Note that the only official abbreviation acceptable for Agriculture Western Australia is "AGWEST".

AGWEST: South Perth

Sonya Broughton has just left QDPI and is now in WA again, finishing off her PhD thesis and working on control of Mediterranean fruit fly. She also undertook a consultancy in Suriname in December 1999, where she spent two weeks evaluating the Carambola fruit fly (*Bactrocera carambolae*) eradication program with **Rui Pereira** from Portugal.

Françoise Berlandier is preparing for another field trial season looking at aphid management in field crops. Good rains over late summer and into

autumn have set the scene for a bumper aphid year. The *Plutella* work has wound down and a parasitoid survey has found at least 6 species of *Plutella* parasitoids.

David Cook reports that the stable fly project is entering its final phase with industry support from HRDC, RIRDC, WA Waste Management Levy Fund, Cattle Industry Compensation Fund and Local Government. The use of poultry litter by horticultural industries supports the development of unacceptably high levels of both house flies and stable flies. As a result, there is a pending ban on the use of raw poultry litter for land application in WA. However, poultry litter put through a conditioning process (i.e., watered and turned daily without the addition of any organic material, as in composting) for around 4-8 weeks may still enable poultry litter to be used as a fertiliser and soil conditioner without the risk of breeding flies. Raw poultry litter will be conditioned out to 10 weeks during each season and then both (i) exposed to flies in the field to assess its ability to support fly development and (ii) used as a preplant and post-plant fertiliser in agronomic trials to determine its value as a fertiliser.

AGWEST: Broome

Tony Postle, WAQIS Entomologist based in Broome, reports that local humans are once again being inundated by the entomological inhabitants of north-west WA, specifically Broome. Heaps of mossies (mostly *Aedes vigilax* and *Aedes alternans*) and March Flies have stirred up public concern and Tony has tried to alleviate their fears by giving half-dozen-or-so radio and TV talks. The rain has held NAQIS field surveys so there will be no bush trips until mid-April.

CSIRO Entomology

Ben Warton has joined **John Matthiessen's** team at CSIRO Entomology to work on the issue of enhanced biodegradation of soil-applied pesticides. The primary focus is on the environmental fate of metham sodium soil fumigant and the risks of enhanced biodegradation occurring in various soil types and production systems. The objective of this HRDC-funded project is to formulate risk profiles and prevention strategies to ensure efficient use of this soil fumigant. Ben has recently completed his PhD in organic chemistry at Curtin University and is now busy setting up the analytical facilities for the project.

Planning is well under way for the 7th Australasian Conference on Grassland Invertebrate Ecology being held at the Tradewinds Hotel, Fremantle, Western Australia from 4-6 October 1999. The conference organising committee is made up of entomology people from CSIRO, AGWEST, Curtin University and UWA and we're looking forward to welcoming colleagues from interstate and overseas.

UWA: Zoology

Win Bailey, Ian Dadour, David Cook and **Pete Davies** scored a major ARC-SPIRT grant titled "Social impact of flies" starting mid-1999 for 3 years, worth $500,000.

The new Forensic Science Postgraduate diploma/MSc starts 2nd semester 1999. This broad based course contains a core unit in forensic entomology and an elective unit. Information about the course can be directed to **Ian Dadour** or the acting Director **Win Bailey** both at the Zoology Dept UWA

In March Professor **James Fullard** (University of Toronto) popped in to work on *Hecatesia* (whistling moths) for a few days before heading on to Geraldton to collect these moths.

In Febuary **Leigh Simmons** from UWA received the Silver Medal from the Royal Society, the highest honour to a scientist under 40 years of age.

Brenton Knotts' honours group, while sampling Ningaloo reef 4 km offshore, collected large numbers of *Pontomyia* spp. An unusual marine dipteran.

UWA: CRC Centre for Legumes in Mediterranean Agriculture (CLIMA)

Regrettably, Federal funding has not been granted for the next round, CLIMA 2. This CRC is located at UWA and consists of AGWEST, Murdoch University, CSIRO and UWA and has been funded until June 2000. Unfortunately, nothing is a sure bet and CLIMA missed out despite wide belief that the Centre has been a model of excellence in its research and, more importantly, in its culture of cooperation across organisations. Reviews of CLIMA indicated that its focus was appropriate. A number of entomologists connected to the Centre through their work on pests of legumes will be affected to varying degrees by this decision. These include **Natalie**

Keals, **Darryl Hardie**, **Françoise Berlandier**, **Debbie Thackray** and **James Ridsdill-Smith**.

Curtin University of Technology

Karl Brennan has taken time out from his PhD (on spiders in the jarrah forest) to conduct baseline monitoring of terrestrial salt lake invertebrates at Lake Lefroy. Invertebrates have been collected from a number of habitats associated with the lake including the lake bed, samphire zone and dunes derived from lake sediments. Groups being considered as potential bio-indicators of the impact of mining include ants, spiders (particularly wolf spiders: Lycosidae), beetles (particularly tiger beetles: Cicindelidae) and a salt lake cricket.

Roger Kitching (Griffith University) visited during April and held discussions on joint work that he and Jonathan Majer are doing on arboreal rainforest ants along a transect from Victoria, to Cape York and through to Brunei. In May, Jonathan Majer flies to South Korea to hold discussions about cooperation with Korean universities and also to present his results on arboreal eucalypt arthropod faunas to the conference of the Korean Entomological Society.

Françoise BERLANDIER
Regional Councillor

FASTS NEWS

Federation of Australian Scientific and Technological Societies.

Science and Parliament

The policy debate rages in Canberra, and there is a whole raft of issues where impending announcements will have major implications for the way science and technology conducts its business in Australia.

The opinion of FASTS is increasingly sought. Part of this stems from our membership of the Prime Minister's Science Council (PMSEIC), which brings me into regular contact with Ministers covering portfolios ranging from Health to Education and the Environment.

As well as formal contact with PMSEIC and groups like the Government Committee on Science and Industry chaired by Senator **Grant Chapman**, I am sounded out and asked informally to suggest names for key appointments.

Minister Minchin recently invited a small group to dinner at Parliament House to discuss science issues and priorities and it is useful on these occasions to inject information from the grass-roots science and technology community.

The matters on which we are asked to comment are becoming increasingly technical with capital gains tax and the future of the tax concession to industry for R&D two examples of issues with a maze of unintended consequences and side effects. Both are two key issues for the science and technology community and both should be seen in the context of clear political signals that neither major party is convinced that money going to R&D is an investment in Australia's future rather than a drain on the public purse.

Both parties are waiting for industry to make up the shortfall by increasing its investment in research. This is despite examples from the US, the UK and Japan. These countries have seen where the future lies and massively increased their public investment in research. The Wills Review on medical research has endorsed these views and I hope the Government adopts the major recommendations of the Report.

The temptation for Parliamentarians faced with making decisions in these areas against a backdrop clamour of competing causes is to look for the short-term solutions. But anyone involved in research knows it can take 15 years from clever idea to marketable product.

Science is not well served in Australia by the fact that only 11 of the 224 MHRs and Senators have formal qualifications in science. Another 5 have engineeering degrees and 13 have qualifications in health care. (Source: Australian Parliamentary Library).

Parliamentarians are not unsympathetic to S&T, but the imperatives of a 3 year Parliamentary term and dealing with a bewildering array of issues are powerful incentives to seek quick and simple answers. What Australia really needs is a considered blueprint for the future.

Green Paper on Research and Research Training

The release of this paper by **Minister Kemp** is imminent. He is expected to allow three months for comment and response, in order to get comprehensive feedback and in contrast to the botched and secretive release of earlier plans to change the system.

FASTS is planning a symposium to discuss the Paper, and allow people from industry and research to exchange views and hear different

perspectives before the time for formal responses has closed.

New Chief Scientist Expected Soon

The announcement of a new Chief Scientist is imminent. The scientific and technological community is watching with interest to see who will pick up the baton from **John Stocker**. Stocker is a hard act to follow. One of the bright spots on the science horizon has been the significant rise in prestige and performance of the Prime Minister's Science Council and I hope the new appointee will be able to match Stocker's astute management of the Council.

The Biotechnology Paper

The FASTS' Occasional Paper on Biotechnology by Board Member **Peter French** has sparked interest in business and political circles. It outlines the possibilities open to Australia if industry, government and researchers act together; and gives a realistic assessment of where our international competition lies. The paper has been widely circulated, and demand from Parliamentary Committees and industry groups has forced a third printing.

Revisions in the Wings

FASTS will release a revised version of its policy document in November this year. All Member Societies have been invited to nominate changes and additions to the document.

Chair of Policy Committee **Ken Baldwin** has convened a Committee meeting for April 30, and is interested in hearing ideas and comments. His email address is: Kenneth.Baldwin@anu.edu.au

One new issue is the increasing difficulty of arranging scientific exchanges, particularly at the postdoctoral level, because of immigration policies in Australia and overseas. Until recently, postdoctoral study overseas was the norm for Australian PhD graduates. Australian laboratories derived substantial benefit from foreign researchers at this level. But many opportunities to fund international exchange visits by scientists are being lost as government policies increasingly favour the appointment of locally qualified people.

Postdoctoral training in Europe is almost prohibited except where individuals have European passports or work permits. Should we be arguing for open borders or is overseas training and experience no longer important for the next generation of Australian scientists?

New FASTS' Brochure

FASTS wants more members! Fifty thousand scientists and technologists belong to the Learned Societies that make up the membership of FASTS but many other Societies could join. A brochure explaining the benefits of membership is available from the FASTS' office.

Response to Wills Review

FASTS' response to Wills Review on medical research generally applauded its recommendations but urged a strengthening and increased funding for the NH&MRC; and also improved infrastructure in universities through full implementation of the Boston Review. Thanks to Board Member **David Tracey** for drafting and ushering through the process of consultation.

New Oceans Policy

Minister Hill's announcement of new funding for Australia's Ocean Territory is welcome although $50 million of research over three years is not going to discover very much about an ocean area larger than the land mass of Australia.

The first meeting of the National Oceans Ministerial Board is expected before the end of April and will select a National Oceans Advisory Group. NOAG will provide technical advice, and marine and geological interests with close links to FASTS should be represented on NOAG.

Commercialising Science

The FASTS' report on the barriers scientists and technologists face in commercialising their science has turned up a whole series of recommendations on how things could be improved. Information was gathered through focus groups involving 120 scientists across Australia. It was carried out with the assistance of a grant from the Department of Industry, Science and Resources and the report is scheduled to be finished in the next few weeks.

National Pride in Science

Some may have missed reports earlier this year of an international survey to find what it was that made people proud of their country. The Melbourne Institute of Applied Economic and Social Research study showed Australians ranked science and technology second highest on their list, behind only sport.

This was the second highest ranking for science and technology in the 24 countries and adds weight to FASTS suggestion to the Government to capture the imagination of all Australians with landmark S&T-based projects to mark the Year 2001.

Peter CULLEN
President
FASTS

ELECTRONIC NEWS

BioLink

BioLink, The Biodiversity Information Management System

The Australian National Insect Collection, CSIRO Entomology, is pleased to announce that BioLink, the Biodiversity Information Management System, is now available for evaluation by the taxonomic, museum and biodiversity communities. This release, Ver. 1.0 (Beta 1), is the first general release of BioLink.

For details concerning BioLink, including a complete online version of the User's Manual, see: **http://www.ento.csiro.au/biolink/home.htm**. Instructions for downloading a copy of BioLink and the BioLink release schedule are also available from this site. You can also contact us directly with any questions and comments at: biolink@ento.csiro.au.

BioLink manages both taxon- and specimen-based information. The current release provides management tools for taxon names ranging from kingdom to subspecies as well as material based on both museum specimens and field observations. Easy to use data entry forms and predefined reports are provided to allow rapid collection and reporting of the highest possible data quality.

BioLink provides a range of tools to assist in data collection and analysis. An online electronic gazetteer assists in the geocoding of sites, including sites described by a distance and direction from a named place (for example 19km SE of Canberra). A mapping tool is also included which can plot distributions of taxa, at any rank, directly from the taxonomic checklist. These maps are fully customisable, can be at any scale or level of detail and can include any number of taxa (each with its own symbol). These maps can be printed directly from BioLink, saved to disk or transferred to a GIS package such as ArcView.

This release of BioLink is provided free of charge. This free distribution will allow evaluation of BioLink's rich and diverse features and permit potential users to assess BioLink's usefulness in fulfilling their information management requirements. Prerequisites for installing BioLink include a Pentium-based PC running Windows 95/98/NT4, 60 megabytes of disk space and a Microsoft SQLServer Ver. 7.0 license. BioLink is designed to run equally well on single PCs, institutional networks and the Internet.

Future BioLink releases, together with their contents and pricing, will be announced on the BioLink web site at:

http://www.ento.csiro.au/biolink/home.htm.

Institutional licensing agreements are available on request from biolink@ento.csiro.au.

Subscription to the BioLink E-Newsletter

Anyone who wishes to be added to the BioLink E-Newsletter mailing list can do so by visiting http://www.ento.csiro.au/biolink/subscribe/subscribe.html. BioLink E-Newsletters will only be issued to announce major BioLink releases or other significant events.

From the entire BioLink Development Team, **David Baird, Natalie Barnett, Neil Fitzsimmons, Ebbe Nielsen, Ian Reid** and **Steve Shattuck**, thanks for your interest in BioLink and we hope you will find it a useful tool while studying the world's biological diversity.

Carabid Discussion List

In order to facilitate communication among people interested in any and all aspects of carabids I am starting an e-mail list. For more information, and if you are interested in participating, please go to **http://henry.ento.cornell.edu/CUIC/carabid_lst.htm** and sign up.

If you experience any problems with the sign up please contact me.

Kipling Will
2144 Comstock Hall
Dept. of Entomology

Cornell University
Ithaca, NY 14853
http://henry.ento.cornell.edu/CUIC/will.htm
Email: kww4@cornell.edu

Museum Victoria Databases

Museum Victoria's web query access into our Victorian Butterfly, Frog and Snake collection management databases is now available. While individual specimen record data is available, the site has been designed to encourage public (ie. non-scientific) use of this data. In particular, it addresses some of the educational requirements of our Victorian Secondary School curriculum in the areas of biodiversity and geography.
The URL is:
http://www.mov.vic.gov.au/bioinformatics/
Feedback on this site would be most welcome.

Ken WALKER
Museum Victoria

COMING EVENTS

Australian Entomological Society 30 AGM and Scientific Conference

28 September - 2 October 1999
Australian National University, Canberra

The 30th AGM and Scientific Conference of the Australian Entomological Society will be held at the Australian National University, Canberra from Tuesday 28 September to Saturday 2 October 1999.

The theme of the conference is "Insects in the Australian Environment". To that end, a number of symposia and sessions is planned including:
- Insects of the arid zone
- Insects as biological indicators
- Insect conservation
- Exotic incursions and quarantine
- Biological control
- Entotainment
- General entomology

Please contact **Glynn Maynard** with further suggestions or enquiries at:
glynn.maynard@aqis.gov.au

The conference is being organised by Australian Convention and Travel Services Pty Ltd. For general enquiries, please contact:
Anette Palm
Telephone: (02) 6257 3299
Facsimile: (02) 6257 3256
Email: conf@ausconvservices.com.au
Website: http://www.ausconvservices.com.au

Glynn MAYNARD
Convenor
30th AGM and Scientific Conference

UNE ASIA CENTRE
INTERNATIONAL CONFERENCE
Where Worlds Collide:
Faunal and floral migrations and evolution in SE Asia-Australasia
to be held at
The University of New England, Armidale, Australia
29 November-1 December, 1999

FIRST CIRCULAR AND CALL FOR PAPERS

INVITATION:

The Organizing Committee cordially invites you to join your colleagues at the international conference *Where Worlds Collide: Faunal and floral migrations and evolution in SE Asia-Australasia*, to be held at The University of New England from 29 November - 1 December, 1999. The conference will form a contribution to IGCP Projects 411 and 421.

OBJECTIVES:

SE Asia is in many respects a unique natural laboratory for studying the effects of geological and tectonic processes and, in particular, continental terrane movements, orogenesis and continental collisions on migration and evolution of a wide variety of animal, plant and insect groups. Waxing and waning physical (geological) and biological (biogeographical) interactions between SE Asia and Australasia go back more than 500 million years and one of the main aims of this conference is to improve our understanding of these relationships both temporally and spacially. Some tantalising questions remaining to be answered include:

* Why is Wallace's Line so well defined and what dictated its position?
* Cretaceous placental mammals in Australasia: ancestors of some Northern Hemishere groups?
* What role(s) did the continental "Arks" of India and Australia play in determining distribution and evolution of organisms in the SE Asian region?
* How have tectonics and terrain movements influenced migrations and evolution in SE Asia-Australasia and the present-day biogeographic patterns of the region?
* What do we know about human dispersals, culture contacts and cultural change in the region?

This conference is designed to provide a forum for answering such questions and to discuss the interaction between physical (geological and tectonic) processes, sea level fluctuations, climate changes and patterns of migration and evolution in the SE Asian-Australasian region.

THEMES:

The conference will be structured into themes. Some preliminary suggested themes are:

* Palaeozoic/Mesozoic geology and biogeography.
* Cenozoic geology and biogeography.
* Primate evolution and biogeography.
* Hominoid migration and dispersal.
* Plant evolution and dispersal in the region.
* Wallace's Line.
* Human dispersals, cultural contacts and change.

PAPERS AND POSTERS:

The organizing Committee now calls for titles, abstracts and papers from intending participants. Abstracts may be up to three A4 pages in length (illustrations and references included) and will be required on disc or by e-mail plus hard copy by 1 July, 1999. These will be published in an Abstracts volume with an ISBN number. Posters are also welcomed.

FIELD EXCURSION:

A one day excursion will be organised for 1 December to examine local New England geology, fauna and flora. Details will be provided in the Second Circular.

PUBLICATIONS:

Selected refereed and accepted papers will be published as a book; negotiations are proceeding with potential publishers. All other papers, following peer review and acceptance, will be published in electronic form as a collection of UNEAC Papers on the Internet via the UNEAC Web Page and on a CD ROM.

REGISTRATION & ACCOMMODATION:

Registration fee for the Conference (including abstracts volume and morning and afternoon teas) will be A$200 (A$150 if by 1 August, 1999) and A$75 for students. Accommodation will be in student colleges (approximate cost for single room, shared bathroom will be A$40) and in Motels in Armidale (approximate cost for a single room with continental breakfast will be A$80). Details will be provided in the Second Circular.

ORGANIZING COMMITTEE:

Convenor and Chairman: A/Prof. **Ian Metcalfe**, Asia Centre, UNE

Other Members:

Prof. **Kevin Hewison**, Director, Asia Centre, UNE

Prof. **Iain Davidson**, Head, School of Human and Environmental Studies, UNE

Dr **Mike Morwood**, Archaeology & Palaeoanthropology, UNE

A/Prof. **N. Prakash**, Botany, UNE

KEYNOTE SPEAKERS:

Prof. **Robert Hall**, Royal Holloway, London University will present a keynote paper on Cenozoic plate tectonics and distribution of land and sea in SE Asia.

Ms **Penny van Oosterzee**, author of the Eureka prize winning book "Where Worlds Collide: The Wallace Line" will present an evening public lecture.

DATES TO REMEMBER:

December, 1998: Release of First Circular

15 February, 1999: Deadline for receipt of pre-registration

1st April, 1999: Release of 2nd Circular and Registration Form

1 July, 1999: Deadline for submission of abstracts

1 August, 1999: Deadline for registration

29 November, 1999: Deadline for receipt of full papers

Please send all correspondence and expressions of interest to:

A/Prof Ian Metcalfe
Convenor, Where Worlds Collide Conference

Asia Centre
University of New England
Armidale NSW 2351
AUSTRALIA
Tel & Fax: 61-2-67733934
Email: imetcalf@metz.une.edu.au

DAMPIER 300
Biodiversity in Australia 1699-1999 and beyond

6 to 10 December 1999
Alexander Library Theatre, Perth Cultural Centre, Francis Street
Perth, Western Australia

Organisers:
Australian Systematic Botany Society
Society of Australian Systematic Biologists
Invertebrate Biodiversity and Conservation

The final biodiversity conference of the 1900s will be held in Perth,Western Australia, from 6 to 10 December 1999. It will commemorate the 300th anniversary of William Dampier's second visit to 'New Holland', when he made the first authenticated collections of plant specimens from the continent. The major theme of the conference will be 300 years of Australian biodiversity-what have we learned, and where do we go in the 21st Century?

Expressions of interest are called for presenting papers and posters. Abstracts will be required by 30 September 1999. Bearing in mind the major historical and scientific themes as set out above, principal areas of interest will be:

* The Shark Bay region, a World Heritage Site with a wealth of arid coastal landforms and diverse geology, flora and fauna
* plant systematics, especially overviews of major groups including cryptogams
* arid zone biodiversity
* invertebrate diversity: subterranean biota, sampling and monitoring protocols, conservation
* co-evolution
* analytical advances and interactive keys
* research priorities and funding

There will be two pre-conference excursions, and an afternoon cruise up the Swan River, including a visit to a winery in the State's original wine-producing district, the Swan Valley.

For further information and for a registration brochure, please contact:

Alex George, Kardinya
ph: (08) 9337 1655
fax: (08) 9337 9404
email: alextris@opera.iinet.net.au

Mark Harvey, Western Australian Museum
ph: (08) 9427 2737
fax: (08)9427 2882
email: mark.harvey@museum.wa.gov.au

Jonathan Majer, Curtin University of Technology
ph: (08) 9266 7041
fax:(08) 9266 2495
email: imajerj@info.curtin.edu.au

Or visit our website at:
http://www.museum.wa.gov.au/Dampier300/Dampier300.htm

Australian needs, Australian Research

FASTS is to hold a forum at the National Press Club on July 14, Bastille Day.

The forum will feature as the lunchtime speaker Mr **Tim Besley AO**, President of the Australian Academy of Technological Sciences and Engineering and Chair of the Commonwealth Bank. His address will be televised live.

The morning session has four prominent speakers, two from research and research administration and two from industry. They will set out their vision for research in Australia, touching on questions such as the level of funding and funding mechanisms.

Speakers will reflect on the proposals raised in the Green Paper on research if the paper has been released by that time. Minister for Education Dr Kemp has been invited to speak at the Form.

You are invited to register for the Forum, and further details will be available shortly.

Mr Toss Gascoigne
Executive Director
FASTS
PO Box 218
DEAKIN WEST ACT 2600

Phone: 02 - 6257 2891 (work)
02 - 6249 7400 (home)
Fax: 02 - 6257 2897
Mobile: 0411-704 409
Email: fasts@anu.edu.au (Toss Gascoigne)
Web address: http://www.usyd.edu.au/su/fasts/

SOUTHERN CONNECTION III
Lincoln University, New Zealand
16-22 January 2000

Organisation is well underway for the third Southern Connection Congress. Information, including forms for registration and offer of congress papers, is available on the congress web page at:

http://www.lincoln.ac.nz/cted/south/

This Web site will be regularly up-dated as the conference organisation progresses.

Please remember to book airfares as soon as possible because demand is high due to millennium celebrations and the defence of the America's Cup in early 2000. Also note that there is a major biodiversity symposium in Wellington, New Zealand, 1-5 February 2000.

If you have any particular questions re Southern Connection III, please contact:

Helen Shrewsbury
Centre for Continuing Education
Lincoln University, Canterbury, NZ
Tel: +(64)(3) 325 2811 ext 8955
Email: shrewsbh@tui.lincoln.ac.nz

Biological Diversity:
Value of Information for the 21st Century

The Species 2000 2nd International Workshop, titled "Biological Diversity: Value of Information for the 21st Century" will be held on July 14 - 16 1999, at Tsukuba International Convention Centre, Japan. The workshop will comprise of issues relating to the world's information resources associated with biological diversity.

The primary aim of the workshop is to highlight the Species 2000 global project and to develop and promote reliable database activity and information networks in the Asia-Oceanic region.

Papers are invited on relevant topics of the conference, including:

* Global Species Database
* Museum, Collection, and Species Bank Information
* Regional and Inter regional Biodiversity Information Resource
* Interoperability of Biological Information Resources
* Standardisation of Taxonomic Information Systems

Abstracts must be submitted by 1st May 1999. Further details, including an abstract form and contact details are available at:
http://www.sp2000.riken.go.jp/sp2kj/workshop.html

COURSE ANNOUNCEMENT
Biology of Disease Vectors
Venue: Manaus (Amazon), Brazil
Date: July 11-24, 1999

Details: Myrmecia 35(1): 21-22
Contact:
Dr Marcelo Jacobs-Lorena,
Case Western Reserve University,
School of Medicine,
Department of Genetics, 10900 Euclid Ave.,
Cleveland, Ohio 44106-4955, USA.
Tel: (216) 368-8749;
Fax: (216) 368-3432;
Email: bdvcourse@po.cwru.edu

SPRAY OILS BEYOND 2000

Sustainable Pest and Disease Management
Sydney, Australia
25-29 October 1999
University of Western Sydney, Hawkesbury
and
University of Florida

Details: *Myrmecia* **34**(4): 33
First Notice and Call for Papers available from:
Alison Frost
Conference Secretary
Hawkesbury Technologies Ltd
UWS Hawkesbury
PO Box 415
Richmond, NSW 2753
Ph: (02) 4570 1690
Fax: (02) 4570 1520
Email: a.frost@uws.edu.au

SOCIETY OF AUSTRALIAN SYSTEMATIC BIOLOGISTS
AUSTRALIAN SYSTEMATIC BOTANY SOCIETY
Invertebrate Biodiversity & Conservation
Perth 1999 Joint Conference

Details: ***Myrmecia*** **34(3): 22-23**

THE NEW PANORAMA OF ANIMAL EVOLUTION "
The New (XVIII) International Congress of Zoology
Athens, Greece
28 August-2 September. 2000

Details: ***Myrmecia*** **34(3): 24**
Contact:
Dr Rosa Polymeni
University of Athens
Department of Biology
Section of Zoology and Marine Biology
15784 Athens, Greece.
Tel. 30-1-7264364
Fax. 30-1-7284604
Email. rpolyme@biology.db.uoa.gr
URL http://www.york.biosis,org/zrdocs/new_icz.

XIVth INTERNATIONAL PLANT PROTECTION CONGRESS

Plant Protection Towards the Third Millennium
Where Chemistry Meets Ecology
Jerusalem, ISRAEL
July 25-30 1999
Details: *Myrmecia* 33(2): 24-25
Contact:
Congress Secretariat
XIVth International Plant Protection Congress
PO Box 50006
Tel Aviv 61500
ISRAEL
Telephone: +972 3 514 0000
Fax: +972 3 514 0077 or 517 5674
Email: IPPC@Kenes.com

XXI International Congress of Entomology
Iguassu Falls, Brazil
20-26 August 2000
Entomologists Preserving Biodiversity
Details: *Myrmecia* 34(1): 30-31.

CALL FOR PAPERS

We are now calling for papers for the XXI International Congress of Entomology. The call will be open from January 1st to December 31st, 1999. Please refer to our homepage (http://www.embrapa.br/ice) for instructions to submit abstracts.

The organising committee should reply 15-30 days after you sent the abstracts. In case of no reply, please call us to verify whether your abstract was received.

If you need more information, please call ice@sercomtel.com.br

Everything you could possibly want to know about the next ICE is available on the Congress Web Page **http://www.embrapa.br/ice**, including details of accommodation, delegates, services, associated activities, administrative matters, sponsors, symposia, etc.

NOTE: As soon as the International Convenors send us the final program for each session, we will be able to release the second announcement of the XXI ICE.

Please, be sure you have updated your postal address on our homepage to receive it.

7th AUSTRALASIAN CONFERENCE ON GRASSLAND INVERTEBRATE ECOLOGY
Perth, Western Australia
September 1999
Details: *Myrmecia* 34(2): 19

Further information:
John Matthiessen
CSIRO Entomology
Private Bag PO
Wembley
Western Australia 6014
Phone: 08 9333 6641
Fax: 08 9333 6646
E-mail: johnm@ccmar.csiro.au
Information also available at:
http://www.agric.wa.gov.au:7000/Ento/ACGIE/

ECONNECT COURSES

1. Presentation Skills Workshop - Designed especially for Scientists - LEARN HOW TO MAKE A TALK WORK FOR YOU AND THE AUDIENCE

Presentation Skills Workshop Dates - 1999
Sydney - June 21-22
Brisbane - September 13-14
Perth - October (Date to be confirmed)

2. Media Skills Workshops - Designed especially for scientists - LEARN HOW TO MAKE THE MEDIA WORK FOR YOU

Media Skills Workshop Dates - 1999
Sydney - June 24-25
Brisbane - September 16-17
Perth - October (Date to be confirmed)

Details: Myrmecia 35(1): 23-24
Contact:
Jenni Metcalfe
ECONNECT
PO Box 734
South Brisbane BC QLD 4101
Phone (07) 3846 7111
Fax (07) 3846 7144
E-mail jenni@econnect.com.au

NEW PUBLICATIONS

New Entomological Taxa

Scientific Reference Resources is pleased to announce the inauguration of a new monthly publication: "New Entomological Taxa". Several major changes have been instituted since the prototype issue was produced last November, as explained below. You may view the first issue at the SRR website:

http://www.sciref.org/net/index.htm

"New Entomological Taxa" is a catalogue of new species, other new taxa and nomenclatural changes which are published involving Arachnida, Acari, Insecta and Myriapoda and the parasites, pathogens and symbionts of these arthropod groups. It is available in printed and Internet versions and you may subscribe to one of eight taxonomic sections at a fraction of the cost of the full edition.

"New Entomological Taxa" offers the most rapid access to the taxonomic literature, most of which is NOT covered by Current Contents. The first issue provides full indexing of all new taxa (including over 400 new species) and nomenclature changes in 180 articles published from 1 to 28 February 1999, and lists the titles of over 100 articles to be indexed in the next issue, all of which were published between 1 and 25 March 1999.

"New Entomological Taxa" now covers over 700 journals and book series which are likely to publish new taxa (including new fossil taxa) of arachnids, acari, insects, myriapods or their microbial, fungal or invertebrate parasites and pathogens. This number is still growing rapidly, primarily through exchange agreements. The current list of journal and book series titles covered is posted at:

http://www.sciref.org/net/net1-1/j1-1.htm

"New Entomological Taxa" is a very inexpensive source of such information -- subscriptions start at $US25 per year (that's $2 per monthly issue!) for a personal subscription to the Internet version of any one of the eight taxonomic sections. Complete subscription details are posted at:

http://www.sciref.org/net/netsub.htm

I hope that you find "New Entomological Taxa" to be a useful and affordable source of current information on new taxa and nomenclature changes in the entomological arthropod groups. If you have any questions or comments regarding this new publication, please contact me at your convenience.

Dr Michael L. Grieneisen, President
Scientific Reference Resources
Post Office Box 73674
Davis, California 95616
USA
E-mail: net@sciref.org
Website: http://www.sciref.org

NOTICES

PhD Opportunity

The Departments of Environmental Management and Ecology (Albury/Wodonga) and Zoology (Bundoora), La Trobe University, seek applications for postgraduate studies leading to a PhD.

The successful applicant will undertake evolutionary studies on a major group of orthopteroids (grasshoppers). In the species *Acrida conica*, sexual dimorphism exists in which the female is larger than the male. There also exists green/brown polymorphism which is either genetically or environmentally controlled. No attempts have been made to integrate both sexual dimorphism and green/brown colour polymorphism in a cohesive life history strategy/model for grasshoppers. The oversight is significant since examples of strong associations between grasshopper colour and grasshopper sex are already described in some species, suggesting that size and colour are linked in determining the optimal life history strategy. An understanding of this relationship will elucidate the fundamental adaptive basis of both size and colour and offer explanations of several life history phenomena including rate of development, microhabitat selection, population structure and mating systems.

The successful applicant will:

1) conduct testing of the possibility of differential thresholds for colour change between the sexes using both laboratory and field experiments.
2) examine the relationships between colour, size, microhabitat selection and female fecundity in both the field and the laboratory and,
3) assess the influence of male size on survival and mating success in laboratory experiments.

The successful applicant will be expected to have a first class or upper second class honours degree in a biological subject and obtain his/her own scholarship.

Further information is available from Dr C. Meathrel (Albury/Wodonga - Ph 02 6058 3875, Fax 02 6058 3888) or Dr T. New (Bundoora - Ph 03 9479 2247).

Closing date for applications: 30 June 1999

POSTGRADUATE SCHOLARSHIP IN MEDICAL ENTOMOLOGY

A postgraduate scholarship is available for a suitable qualified candidate with a degree in the biological sciences to undertake research studies leading to an MSc in medical entomology.

The project involves investigations of the ecology and control of mosquito populations in saline and freshwater wetlands. The research will involve field studies with longitudinal sampling of larval and adult populations, evaluations of control operations, and laboratory studies on aspects of mosquito biology and ecology.

Applicants should have knowledge of and experience with the ecology, sampling and gross identification of aquatic invertebrates, and preferably have some field experience with mosquitoes. The successful applicant will be based at Westmead Hospital in Sydney, and the field work will be primarily in the Homebush Bay area of Sydney.

The scholarship is valued at $16,135.00 p.a. (tax free) with a $3,720.00 p.a. car allowance, and is tenable for two years from 1 July 1999.

Applicants should be Australian citizens or have been permanently resident in Australia for at least 12 months.

Further information can be obtained from:
Associate Professor **Richard Russell**
Department of Medical Entomology,
Westmead Hospital, Westmead, NSW 2145.
Telephone: (02) 9845 7279
Fax: (02) 9893 8659
Email: RichardR@cidm.wh.usyd.edu.au

Applications should be sent directly to Professor Russell at the above address.

Closing date: 4 June 1999

Australian Quarantine Week 1999
just another week?

Quarantine is something that's easy to be a bit blasé about. After all, if it's OK to eat that piece of cheese, salami or fruit on our overseas holidays why is it suddenly a problem when we enter Australia and have to hand them over to quarantine?

I'm sure this is a familiar situation for many Australians - and visitors to Australia. It's easy to be a little complacent and run the risk of being caught. The only problem is that one piece of infected fruit, one piece of diseased meat or one

borer-riddled wooden souvenir COULD be responsible for the devastation of an Australian agricultural industry or our natural flora and fauna.

AQIS (the Australian Quarantine and Inspection Service) wants all Australians and visitors to Australia to know why quarantine matters and what they can do to ensure that we keep this country one of the cleanest and greenest in the world.

You can do something really simple to help. Just log into the AQIS Web-site at:

http://www.aqis.gov.au

and check out the wealth of information for travellers, educators, importers, primary producers . . . and so on.

When you next travel or return to Australia, or send international mail to Australia, just pause a moment and make sure you're doing your bit to look after this wonderful country of ours.

This message was initiated by Public Relations section of the Australian Quarantine and Inspection Service (AQIS) in Canberra, GPO Box 858, Canberra ACT 2601 Australia

Phone: +61 2 6271 6386
Fax + 61 2 6272 4494
Email: pr@aqis.gov.au

Successful CRC Funding applicants in 1999

Sector: Environment
Investment $107.5M/7 years
Winners:
- Biological Control of Pest Animals
- Catchment Hydrology
- Coastal Zone Estuary and Waterway Management
- Freshwater Ecology
- Great Barrier Reef World Heritage Area
- Terrestrial Carbon Accounting
- Tropical Rainforest Ecology and Management

Sector: Agriculture
Investment $57M/7 years
Winners:
- Cattle and Beef Quality
- Australian Cotton
- Tropical Plant Protection
- Viticulture

Sector: Medical Science and Technology
Investment $39M/7 years
Winners:
- Asthma
- Cochlear Implant and Hearing Aid Innovation
- Vaccine Technology

Sector: Mining and Energy
Investment $26M/7 years
Winners:
- Hydrometallurgy
- Clean Poser from Lignite

Sector: Manufacturing
Investment $92M/7 years
Winners:
- Microtechnology
- Polymers
- Welded Structures
- Bioproducts
- Cast Metals Manufacturing
- Intelligent Manufacturing Systems

Sector: Information and communication technology
Investment $75.5M/7 years
Winners:
- Australian Photonics
- Australian Telecommunications
- Enterprise Distributes Systems Technology
- Sensor Signalling and Information Processing

Toss GASCOIGNE
Executive Director, FASTS

DAAD-Research Grants to Germany

The German Academic Exchange Service (DAAD) offers Research grants for 'Short Term Visits' (1 - 6 months) for PhD candidates and recent PhD's for their dissertation or post-doctoral research (age limit 32).

DAAD also offers 'Study Visits' for research projects in Germany for 1-3 months. At least 2 years postdoctoral teaching experience at a university or research is necessary to be eligible.

For further information please contact the Embassy of the Federal Republic of Germany, Canberra

Marie-Louise CORDES
Third Secretary
Embassy of the Federal Republic of Germany
Tel: 02 62701911
POEA Internet Canberra:
106030.2144@compuserve.com

Australian Entomological Society
CALL FOR NOMINATION/ RENOMINATION OF OFFICERS & REGIONAL COUNCILLORS

The following Offices will fall vacant at the Society's 30th AGM in September 1999. Nominations for election should be made on the form provided and should reach the Secretary no later than 1 September 1999.

Vacant Office	Present Incumbent
(Executive positions are appointed for periods of two years and incumbents are eligible for re-election)	
News Bulletin Editor	Dr M.J. Fletcher
Regional Councillors	
(Regional Councillors are eligible for re-election for up to three years only)	
Queensland	*Mr I.R. Kay
	Dr Tony Clarke
	Dr Jamie Seymour
New South Wales	(vacant)
	*Dr G.M. Gurr
	Mr Cameron Webb
Australian Capital Territory	*Dr M. Matthews
	Dr W. Odgers
Victoria	Ms D. Glenn
	Ms F. Clissold
South Australia	*Dr G.S. Taylor
	(vacant)
Tasmania	*Dr J. Elek
Western Australia	*Ms F.A. Berlandier
Northern Territory	*Mr G. Bellis

*** not eligible for re-election**

Representative Councillors	
(Representative Councillors are appointed by the affiliated Societies. There are no restrictions on terms served in this capacity)	
Ento. Society of Queensland	Dr J. King
Ento. Society of NSW	Dr A.D. Clift
Ento. Society of Victoria	Mr R. MacPherson

Australian Entomological Society
30th Annual General Meeting
29 September 1999

The Society's 30th Annual General Meeting is tentatively set for 29 September 1999. Formal notification will appear in the next issue of *Myrmecia*.

A draft agenda for the AGM appears below. Members wishing to have additional items included must notify the Secretary, at the address on the inside front cover of this issue, by **Friday 27th July 1999** to ensure its inclusion on the provisional agenda to be published in the next issue of *Myrmecia*.

Draft Agenda
30th Annual General Meeting
Canberra, ACT
29 September 1999

1. Opening and General Announcements
2. Announcements of Proxies and Apologies
3. Deaths of Members recorded since 29th AGM
4. Minutes of 29th AGM
5. Business Arising out of the Minutes of 29th AGM
6. Executive Annual Report, including Reports of Vice-President, Treasurer, Business Manager, Chief Editor and Editor of News Bulletin
7. Report of the Conservation Committee
8. Competitions and Awards
9. Business arising from the 58th Council Meeting, Canberra
10. Announcements of Office-bearers and Councillors for 1999-2000
11. Report of the Organising Committee, 30th Annual General Meeting and Scientific Conference
12. Report of the Organising Committee, 31st Annual General Meeting and Scientific Conference
13. Other business (arranged with the Secretary no later than 27 July 1999)
14. Close

Australian Entomological Society Inc.

APPOINTMENT OF PROXIES

I, ...

of . . . . . .

. . . . . .

being a member of the above-named Society,

hereby appoint . . . . . .

of . . . . . .

. . . . . .

as my proxy to vote for me on my behalf at the Council Meeting, Annual or Special General Meeting, as the case may be, of the Society, to be held during 28 September - 2 October 1999, and at any adjournment thereof.

Signed this . . . . . .

day of . . . . . 19 . . .

Signature . . . . . .

(A photocopy of this form may be used)

Australian Entomological Society Inc.

NOMINATION OF OFFICER OR COUNCILLOR

I nominate . . . . . .

for election to the office of . . . . . .

. . . . . .

Name of nominator . . . . . .

Signature . . . . . .

Date . . . . . .

I second this nomination

Name of seconder . . . . . .

Signature . . . . . .

Date . . . . . .

I accept this nomination*

Signature . . . . . .

Date . . . . . .

* The nominee is requested to attach a typed statement, not exceeding 300 words, which includes the following: professional qualifications, address, institution, position held, fields of entomological interest, previous offices or appointments held in the Australian Entomological Society, any other information which may be of interest to members.

(A photocopy of this form may be used)

Please send all nominations to Dr David Evans Walter, Dept Entomology, The University of Queensland, St Lucia, Qld 4072 before **1 September 1999.**

The Australian Entomological Society Inc.

INSECT ILLUSTRATION COMPETITION

The Australian Entomological Society invites previously unpublished and undisplayed entries to this competition to be judged and displayed at the Society's Annual Scientific Conference to be held in Canberra 28 September - 2 October 1999.

Illustrations of an insect, arachnid or myriapod will be accepted.

Categories will be:

- Colour Illustration
- Black & White Illustration
- Colour Photography
- Black & White Photography (including SEM)

Maximum entries: three per person

Entries should be mounted and brought/delivered to the AGM in Canberra. All proposing to enter should notify:

Anette Palm
A.C.T.S.
Ph (02) 6257 3299
Fax (02) 6257 3256
email: conf@ausconvservices.com.au

at least a week before the meeting. This is to ensure that sufficient boards are available for mounting.

Illustrations should not exceed 21 x 30 cm.
Photos should not exceed 20 x 25 cm.

EACH ENTRY MUST HAVE THE FOLLOWING INFORMATION ON THE BACK:

Name and Address of entrant
Category of entry
Title of the entry
Scientific Name of the organism illustrated (if known)

THE AUSTRALIAN ENTOMOLOGICAL SOCIETY INC.

FORM OF NOMINATION FOR MEMBERSHIP

To be returned to:
Dr D.E. Walter, AES Secretary, c/o Dept. of Entomology
University of Queensland, QLD 4072

We the undersigned

Proposer: ....
(print name here) (signature)

Seconder: ....
(print name here) (signature)

being financial members of the Society, propose the following for membership of The Australian Entomological Society Inc.:

Title .. Initials .. Given Name ..... Family Name .....

of (Address): .....

.....

Tel: ..... Fax: .....

Email: ..... Degrees, etc: .....

Occupation or Appointment: .....

Interests, experience and publications in entomology for publication in the News Bulletin *Myrmecia* (please attach brief resumé):

I accept nomination and undertake if elected to abide by the rules of the Society and to pay annual subscriptions by the date prescribed.

Signature: ..... **Date:** .....

For **1999**, new student/retired members - $25.00; new full members - $55.00. **Payment with nomination required.** (NB. These rates only apply for new memberships.

.....

(EXECUTIVE USE ONLY)

Nom. received: ..... Nom. considered at meeting: .....

Payment received: ..... Elected at meeting: .....

Membership type: ..... Applicant advised: .....

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